

CLAIMS

1. A hinge (1, 9, 12, 17, 40, 50) for eyeglass arms the rotation of which is controlled by elastic means, wherein the hinge comprises a chamber (2, 13, 18, 14, 51) integral with the eyeglass frame, an end of a arm (3, 3A, 44, 52) hinged therein and at least one first elastic means in the form of a flexure element (4, 10, 14, 19, 24, 27, 42, 53, 54), the end of the arm and the flexure element being reciprocally positioned and in contact with each other in such a manner as to control the rotation of the arm between an open position and a closed position and to retain it in said positions.

2. A hinge (1, 9, 12, 17, 40, 50) for eyeglass arms in accordance with claim 1, wherein the centre of rotation of said end (3, 3A, 44, 52) hinged within the chamber coincides with the centre of the chamber.

3. A hinge (1, 9, 12, 17, 40, 50) for eyeglass arms in accordance with claim 1, wherein the centre of rotation of said end of the arm (3, 3A, 44, 52) is displaced from the centre of the chamber in order to increase or diminish the pressure of said end on said flexure element.

4. A hinge (1) for eyeglass arms in accordance with claim 1, wherein said flexure element is a lateral leaf spring (4) retained along the lateral wall of the chamber by appropriate seatings (5) of the chamber and said spring comprises two concave seatings (C, C') set at a certain distance apart to alternately receive an extension (8) of the arm (3) and block the latter, respectively, in an open and a closed position (A, B).

5. A hinge (9) for eyeglass arms in accordance with claim 1, wherein said flexure element is a lateral leaf spring (10) that comprises at least one concave seating (11) between said two opposite concave seatings (C, C') to block the arm in an intermediate position.

6. A hinge (12) for eyeglass arms in accordance with claim 1, wherein said flexure element is a lateral leaf spring (14) integrally attached to the extension (8) of the arm (3) and said chamber comprises a plurality of concave seatings (16) on the lateral wall, each capable of receiving said extension (8) with the spring (14).

5 7. A hinge (17) for eyeglass arms in accordance with claim 1, wherein said flexure element is a transverse leaf spring (19) in the form of a circular crown engaged within the chamber (18) with either the top or the bottom of the end of the arm, which spring (19) comprises a plurality of undulations (20) that form seatings (21) to receive the end of the arm.

10 8. A hinge for eyeglass arms in accordance with claim 1, wherein said flexure element is a transverse leaf spring (24) in the form of a circular crown engaged within the chamber (18) with either the top or the bottom of the end of the arm, which spring (24) comprises a plurality of undulations (25), and that the end of the arm (3A) comprises a concave seating (26) to receive said undulations.

15 9. A hinge for eyeglass arms in accordance with claim 1, wherein the end of the arm (3, 3A) comprises a flexure element in the form of a transverse leaf spring (27) oriented either towards the upper or the lower wall of the chamber, these walls being provided with a plurality of concave seatings (30) to receive said flexure element (27).

20 10. A hinge (50) for eyeglass arms in accordance with claim 1, wherein it comprises both a lateral spring (53) and a transverse spring (54).